INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
EIGHTEENTH MEETING (APIRG/18)
Kampala, Uganda (27 – 30 March 2012)

Agenda Item 3.2: Air Traffic management and Search and Rescue (ATM/SAR)

PBN IMPLEMENTATION IN AFI – EN ROUTE

(Presented by IATA)

SUMMARY

In order to address:
   • The issue of slow pace of implementation of routes;
   • Revised old and new route requirements of airspace users;
   • Discussed and agreed on the implementation of routes
ICAO and IATA and the stakeholders in the spirit of Collaborative Decision Making (CDM) engaged in an effective implementation user preferred routes.

REFRENCE(S):
 	
   • APIRG 15 and 16 approved routes
   • AFI Air Navigation Plan
   • Recommendations of the Special AFI RAN held in November 2008 in Durban
   • Report of the First Joint Meeting of the APIRG Performance Based Navigation and Global Navigation Satellite System Implementation Task Forces.
   • Report on PRND WG 1 & 2; Route Lab 2 & 3; iFLEX 1, 2 & 3

Related ICAO Strategic Objective(s): A & C

1. INTRODUCTION

1.1.   In order to address the issue of slow pace of implementation of routes and to revise old and new route requirements of airspace users, ICAO and IATA and the stakeholders, in the spirit of Collaborative Decision Making (CDM) engaged in the process of en-route user requirements implementation.

1.2.   In April 2010, APIRG First Joint Meeting of the APIRG Performance Based Navigation and Global Navigation Satellite System Implementation Task Force agreed that IATA host the first PRND Working Group meeting. Outcome of PRND/1 was presented during APIRG/17.

Subsequently, six more meetings were held:

- "RouteLab 2" was held in October 2010
- "RouteLab 3" was held in November 2010.
- "iFLEX" workshop was held in January 2011
- "iFLEX" workshop was held in February 2011
- "iFLEX" workshop was held in March 2011
- PRND WG/2 was held in November 2011

2. DISCUSSION

2.1 *Implementation*

2.1.1 "RouteLab 2": 18 Routes agreed upon for implementation. To date 18 routes implemented as indicated in **Appendix A**. Potential annual Savings of 1.9 million kg of CO_2 for two airlines based on one-way daily service over AORRA.

2.1.2 "RouteLab 3": 8 Routes agreed upon for implementation. To date 8 routes partially implemented (AFI Segment only) as indicated in **Appendix B**. Potential annual savings of 2.3 million kg of CO_2 for two airlines based on one-way daily service over the Indian Ocean.

2.1.3 "iFLEX workshop 1" provided more crossing segments to the EUR – SAM corridor (UN741, UN866, UN873, and UN857) and introduced more entry and exit points to and from AORRA airspace as indicated in **Appendix C**. Potential annual savings of 2,150 million tones of CO_2 for only one airline, based on twice daily service over the Atlantic Ocean.

2.1.4 "iFLEX workshop 2": Within AFI, 20 Routes agreed upon for implementation, although some route segments require additional coordination (Entebbe FIR, Nairobi, Addis Ababa and Khartoum FIRs). To date, 25 routes / route segments (routes affected by "No-fly" zone in Tripoli FIR will be implemented at a later stage) implemented as indicated in **Appendix D**. Potential annual saving is under review.

2.1.5 "iFLEX workshop 3" Addressed safety assessment and aeronautical publication of user preferred trajectories and routes agreed during iFLEX WS1 and iFLEX WS2.

2.1.6 Through other initiative, 1 additional route segment was implemented (UB533).

2.2 In addition to routes/route segments presented in Working Paper under agenda item 1.2: "IATA update on implementation of APIRG outstanding conclusions & decisions from previous meetings" Table 1, below is "Route Catalogue[1]" of routes/route segments pending implementation:

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[1] Route segments / routes presented during PRND WG 1 & 2; Route Lab 2 & 3; iFLEX 1, 2 & 3

Table 1

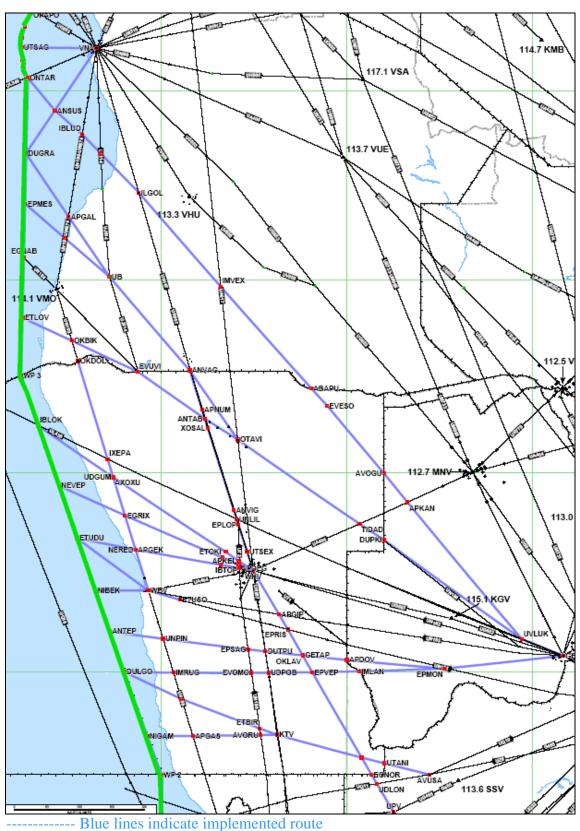| No	Route Designator	Route Segment	Country	Comment
3.	UT151	OXILO-DCT-LAG	Nigeria	Route Lab 1
4.	UT263	LUKRO-KAN	Nigeria	Route Lab 1
5.	UT271	TLE-MPK	Nigeria	Route Lab 1
6.	UQ592	BIRNI-ODMAP	Nigeria	iFLEX 2
7.	UT127	TIKAR-MRW	Sudan	Route Lab 1
8.	UQ583	KITEK-KNA-KTM	Sudan	iFLEX 2
9.	UT419	ASKON-MLK-TIKAT-OHA(-GEREK-HDH)	Sudan Ethiopia Asmara	iFLEX 2
10.	UB535[2]	JUB-SAGBU	Sudan	Route Lab 1
11.	UT129	ALEMU-GWZ	Ethiopia	Route Lab 1
12.	UQ579	TAREM-EKBUL-IKMIT-EWA	Uganda Kenya Ethiopia	iFLEX 2
13.	UT261	BRN-DCT-ATMUL	Egypt	Route Lab 1; Awaiting Military Clearance
14.	UQ597	DANAD-METSA	Egypt	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
15.	UQ598	DITAR-PASAM	Egypt Libya	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
16.	UQ599	KFR-ALSEP-KHG	Egypt Libya	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
17.	UQ595	KHG-KIRET	Egypt	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
18.	UQ594	LIGAT-KARUK-ORMOL	Egypt Libya	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
19.	UQ596	IPOBA-TWARG-TUKAM-IMRAD	Algeria Libya Egypt	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
20.	UQ853	DJA-TWARG	Algeria	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
21.	UQ594	LIGAT-KARUG	Libya	iFLEX 2: Pending resolve of "No-Fly" zone in Tripoli FIR
22.	UW325	SIPKI-GOVEL-MISRU-MENIT-FL	Chad CAR DRC	Requested in July 2011
23.	UB533[2]	NV-DV-VPN	Mozambique	Requested in July 2011

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[2] Conventional route

3

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a) Request States and Air Navigation Service Providers to proceed towards implementation of the User Required routes as indicated in Table 1 by 26 July 2012 AIRAC date.

b) Request States and Air Navigation Service Providers, who haven't done so, to coordinate change of temporary route designations in accordance to ICAO ESAF letter dated 30 November 2011 (Ref ES AN 1/10-1011, Proposal for Amendment of the ICAO AFI Air Navigation Plan, volume 1, Basic ANP).

c) In order to meet ICAO commitment to reduce CO_2 emissions by 2% annually, States and Air Navigation Service Providers are encouraged to adopt a "RouteLab" style format enabling timely response to industry needs.
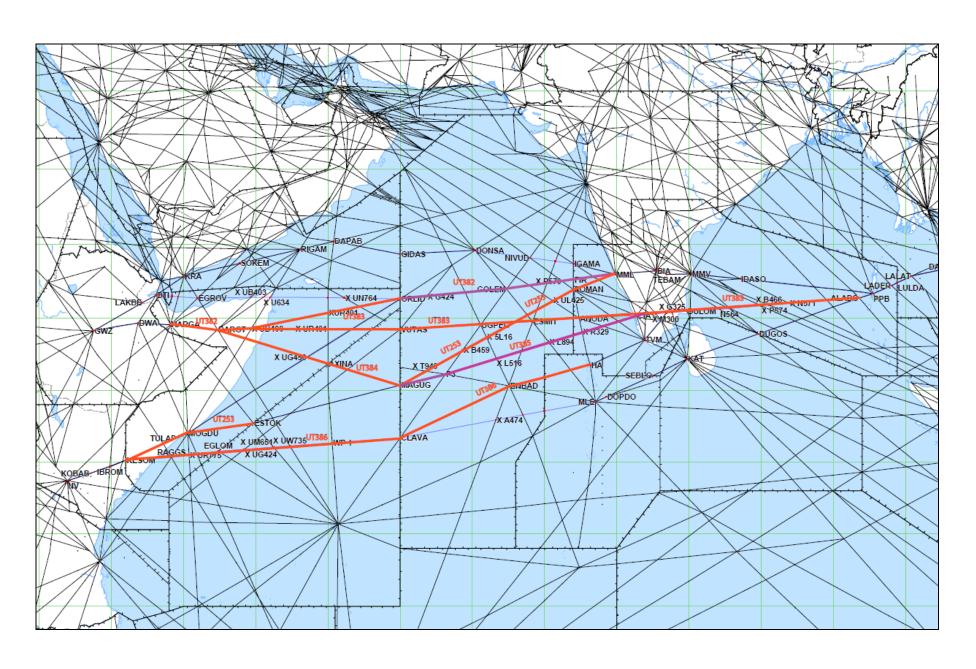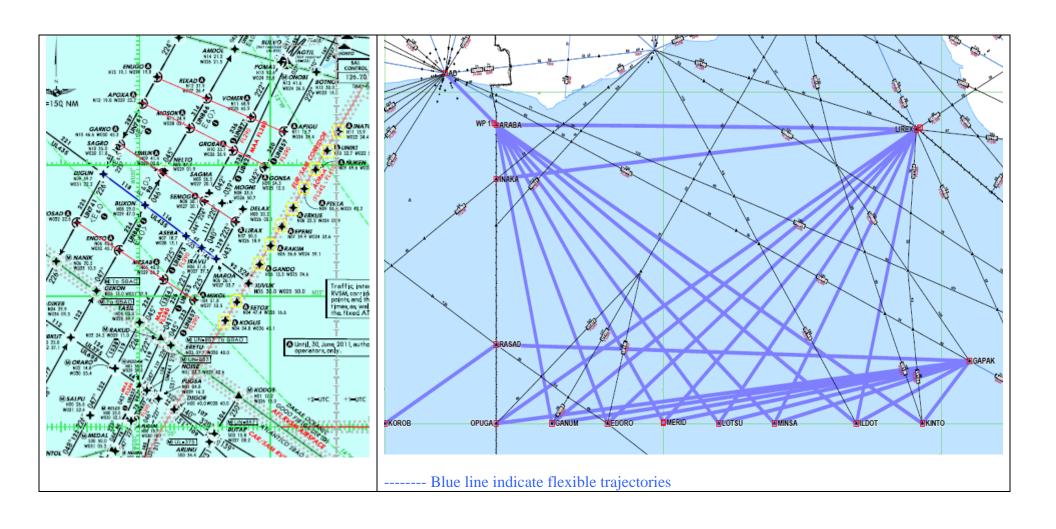
-END-

Appendix A – "Route Lab 2"

-------------- Blue lines indicate implemented route
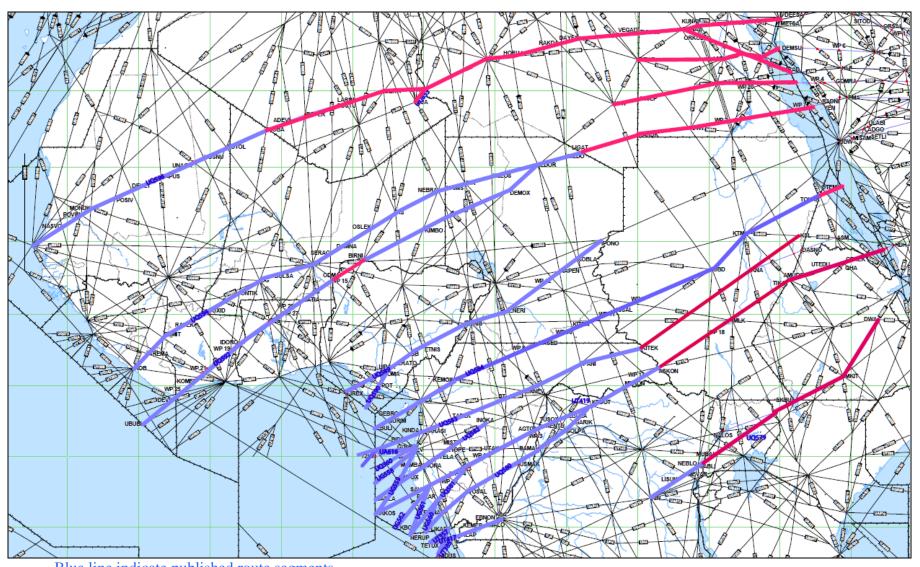-------------- Green line indicate AORRA boundary

Appendix B - "Route Lab 3"

Appendix C – "iFLEX II"

-------- Blue line indicate flexible trajectories

Appendix C – "iFLEX II"

-------- Blue line indicate published route segments
-------- Red line indicate route segments pending implementation